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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,937	01/21/2004	Alexander G. MacInnis	51706/JEJ/B600	5694
23363	7590	11/01/2005	EXAMINER	
CHRISTIE, PARKER & HALE, LLP			BRIER, JEFFERY A	
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/762,937	Applicant(s) MACINNIS ET AL.	
	Examiner Jeffery A. Brier	Art Unit 2672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 at line 8, claim 8 at line 9, and claim 15 at lines 6-7 all claim "at a display time", however, this term does not clearly claim the described method of generating pixels, storing the pixels in graphics line buffers, scaling up or down the pixels stored in the line buffer, and storing the scaled pixels in frame format (Page 46 lines 1-12.).

Since applicants preferred embodiment as described in the specification generates the pixels before "display time" on the display device, then, the claim limitation of generating the pixels at a display time is indefinite. It is noted that an alternative embodiment alludes to foregoing a frame buffer, this, embodiment does not define a "display time".

Page 10 line 7 to page 11 line 19 discusses having display engine 58 output directly to a display but it does not state how multiple overlapping windows will be formed at each pixel of the display without using a buffer or accumulator and does not state when the pixels are generate. Page 18 line 24 to page 4 discusses having video compositor 108 compose windows directly to the display but this is different then generating pixels.

Page 46 lines 1-12 as well as page 10 line 7 to page 11 line 19 states using buffers is preferred. Note DATAMIZE, LLC, v PLUMTREE SOFTWARE, INC., 75 USPQ2D 1801

(CAFC DECIDED: August 5, 2005) concerning the affects of deleting limitations in a child application's claims that are present in a parent application's claims.

Claims 1-14 claim a single color for a graphics image and a logical surface. If a single color is both the logical surface and the graphics image then one cannot see the graphics image from the logical surface since they are the same color.

Claims 15-20 claim a single color for a graphics image and a window. If a single color is both the window and the graphics image then one cannot see the graphics image from the window since they are the same color.

Claims 1-14 claim the logical surface and the graphics image are separate but after reviewing page 30 lines 8-15 of applicants specification it is clear in applicants specification the logical surface and the graphics image are the same. Additionally these claims claim graphics images per logical surface which is also incorrect after reviewing the same section of the specification. Therefore, these claims do not clearly claim the invention.

Claims 15-20 claim the window and the graphics image are separate but after reviewing page 30 lines 8-15 of applicants specification it is clear in applicants specification the window and the graphics image are the same. Additionally these claims claim graphics images per window which is also incorrect after reviewing the same section of the specification. Therefore, these claims do not clearly claim the invention.

These broad claims when read in light of the specification at page 23 line 28 to page 53 line 20 without the extra fields of claim 2 appear to be objected oriented

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graphics programming for overlapping rectangles. Thus, these claims need to be amended to better claim applicants disclosed inventive data structure.

Claims 1-7 claim in the preamble a data structure while the "wherein" clauses add method steps. Is this claim a data structure or a method of using a data structure?

Note a data structure *per se* claim is non-statutory. See MPEP 2106 which states (emphasis added by underlining).

1. Nonstatutory Subject Matter

Both types of "descriptive material" are nonstatutory when claimed as descriptive material *per se*. *Warmerdam*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory). When nonfunctional descriptive material is recorded on some computer-readable medium, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material stored in a computer-readable medium does not make it statutory. Such a result would exalt form over substance. *In re Sarkar*, 588 F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 1978) ("[E]ach invention must be evaluated as claimed; yet semantogenic considerations preclude a determination based solely on words appearing in the claims. In the final analysis under 101, the claimed invention, as a whole, must be evaluated for what it is.") (quoted with approval in *Abele*, 684 F.2d at 907, 214 USPQ at 687). See also *In re Johnson*, 589 F.2d 1070, 1077, 200 USPQ 199, 206 (CCPA 1978) ("form of the claim is often an exercise in drafting"). Thus, nonstatutory music is not a computer component and it does not become statutory by merely recording it on a compact disk. Protection for this type of work is provided under the copyright law.

Claims 2 and 9 use the phrase "at least one of" however, the specification did not describe using more than one of the listed fields for each logical surface or window. If

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applicant intends for the list to be alternative then applicant will need to amend these claims. Note the following court decisions.

Superguide Corp. v. DirecTV Enterprises, Inc., 358 F.3d 870, 69 USPQ2d 1865, 1878 (Fed. Cir. 2004). Page 1878 states:

We agree with DirecTV. The phrase “at least one of” precedes a series of categories of criteria, and the patentee used the term “and” to separate the categories of criteria, which connotes a conjunctive list. A common treatise on grammar teaches that “an article of a preposition applying to all the members of the series must either be used only before the first term or else be repeated before each term.” Willaim Strunk, Jr. & E. B. White, *The Elements of Style* 27 (4th ed. 2000). Thus, “[i]n spring, summer, or winter” means “in spring, in summer, or in winter.” *Id.* Applying this grammatical principle here, the phrase “at least one of” modifies each member of the list, i.e., each category in the list. Therefore, the district court correctly interpreted this phrase as requiring that the user select at least one value for each category; that is, at least one of a desired program start time, a desired program end time, a desired program service, and a desired program type.

IPXL Holdings LLC v. Amazon.com Inc., 72 USPQ2d 1469, 1480 (DC EVa 2004) makes a decision similar to SuperGuide. Page 1480 states:

The parties dispute whether “user defined transaction information” requires both a “user defined transaction” *and* a “user defined transaction parameter” as Amazon contends, or only one of either a “user defined transaction” *or* a “user defined transaction parameter,” as IPXL contends. For the reasons set forth below, the Court finds that IPXL misreads both the plain words used in the claim as well as Federal Circuit precedent in arguing for its interpretation. In construing the very same language, the Federal Circuit construed “at least one of” to mean what Amazon has argued.

The phrase “at least one of” precedes a series of categories of criteria, and the patentee used the term “and” to separate the categories of criteria, which connotes a conjunctive list. A common treatise on grammar teaches that “an article of a preposition applying to all the members of the series must either be used only before the first term or else be repeated before each term.” William Strunk, Jr. & E.B. White, *The Elements of Style* 27 (4th ed. 2000)... . Applying this grammatical principle here, the phrase “at least one of” modifies each member of the list, i.e., each category in the list. Therefore, the district court correctly interpreted this phrase as requiring that the user select at least one value for each category... . *SuperGuide Corp. v. DirecTV Enterprises, Inc.*, 358 F.3d 870, 886 [69 USPQ2d 1865] (Fed. Cir. 2004).

CAFC decision *Brown v. 3M*, 265 F.3d 1349, 60 USPQ2d 1375 (Fed. Cir. 2001)

This decision found that the term “or” in claim 16 in the *at least one of two-digit, three-digit, or four-digit year-date representations* phrase is to be read in the alternative when read in light of the specification. Page 1378 states:

The district court construed the word “or” in claim 16 as meaning that the apparatus was capable of converting “only two-digit, only three-digit, only four-digit, or any combination of two-, three-, and four-digit date-data.” Slip op. at 9. We agree with this construction of the claim, for it is the plain reading of the claim text. These are not technical terms of art, and do not require elaborate interpretation. There is no basis in the specification or prosecution history for reading “or” as “and” — nor does Dr. Brown request such a reading.

Claims 16, 19, and 20 claim “at least one of the data structures”. The specification does not describe using more than one of the fields to “indicate color of the graphics image” (claim 16)(How can the pixels of the same logical surface or window have different colors when the pixels are to have the same color?), “alpha value for the graphics image” (claim 19)(How can the pixels of the same logical surface or window have different alpha values or sets of alpha values when the pixels are to have the same alpha value or alpha values?), and “location of a corresponding window” (claim 20)(How can the logical surface or window have different locations when they are to have one location?).

3. Claims 1, 5, and 6 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: additional fields to make the claim a complete data structure. A single field data structure cannot perform

the functions alleged in the two wherein clauses. At least the fields of claim 2 is needed.

4. Claims 8, 12, 13, 15-20 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: additional fields to make the claim a complete data structure. A single field data structure cannot perform the functions alleged in the two wherein clauses. At least the fields of claim 2 is needed.

3. A prior art rejection cannot be made because the metes and bounds of the claims are not definite and because the specification does not support the claims. Thus, an indication of allowability would be premature. In re Steele, 305 F.2d 859, 134 USPQ 292 (CCPA 1962) (it is improper to rely on speculative assumptions regarding the meaning of a claim and then base a rejection under 35 U.S.C. 103 on these assumptions). Similarly a determination of double patenting with parent patent no. 6,731,295 is not possible. Applicant may wish to file a terminal disclaimer since the claims of this application are possibly directed in a broad way to the same embodiment that the patent claims cover. Applicant should note that broader versions of patented claims are an obvious way for applicant to claim the same thing patented. *In re Vogel*, 422 F.2d 438, 164 USPQ 619, 623 (CCPA 1970). Vogel stated on page 623 "*The answer to the second analysis question, therefore, is yes, and the claim is not allowable in the absence of a terminal disclaimer. The correctness of this conclusion is*

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demonstrated by observing that claim 10, by reciting "meat," includes pork. It is further noted that viewing the inventions in reverse order, i.e. as though the broader claims issued first, does not reveal that the narrower (pork) process is in any way unobvious over the broader (meat) invention disclosed and claimed in the instant application."

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Engstrom et al., US Patent No. 5,850,232, teaches in column 7 lines 7-17 color filling a window or an object in a window.

Sutherland et al., US Patent No. 5,903,277, teaches with reference to figure 3 a data structure that defines a color for a window and its objects.

Katsura et al., US Patent No. 5,631,668, teaches using a color value to fill objects.

Oda et al., US Patent No. 5,258,747, teaches a data structure defining color values for a respective window.

4. These broad claims when read in light of the specification at page 23 line 28 to page 53 line 20 without the extra fields of claim 2 appear to be objected oriented graphics programming for overlapping rectangles. Thus, these claims need to be amended to better claim applicants disclosed inventive data structure. A definition for Object oriented graphics programming may be found at:

http://www.webopedia.com/TERM/O/object_oriented_graphics.html

object-oriented graphics

Last modified: Tuesday, November 25, 1997

The representation of graphical objects, such as lines, arcs, circles, and rectangles, with mathematical formulas. This method of describing objects enables the system to manipulate the objects more freely. In an object-oriented system, for example, you can overlap objects but still access them individually, which is difficult in a bit-mapped system. Also, object-oriented images profit from high-quality output devices. The higher the resolution of a monitor or printer, the sharper an object-oriented image will look. In contrast, bit-mapped images always appear the same regardless of a device's resolution.

One of the most widely used formats for object-oriented graphics is PostScript. PostScript is a page description language (PDL) that makes it possible to describe objects and manipulate them in various ways. For example, you can make objects smaller or larger, turn them at various angles, and change their shading and color. A font described in PostScript, therefore, can easily be transformed into another font by changing its size or weight. Object-oriented fonts are called outline fonts, scalable fonts, or vector fonts.

Object-oriented graphics is also called vector graphics, whereas bit-mapped graphics is sometimes called raster graphics.

Information Disclosure Statement

5. The information disclosure statement filed 1/21/2004 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. The foreign patent references cited on page 8 of 18 and 11 of 18 were not found in the parent file wrapper and they are not readily available to the examiner. The other documents cited on pages 3 of 18, 8 of 18 and 9 of 18 have not been considered because they were not found in the parent file wrapper and they are not readily available to the examiner. Please submit copies of these references if applicant wishes to have it considered.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffery A Brier whose telephone number is (571) 272-7656. The examiner can normally be reached on M-F from 7:00 to 3:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi, can be reached at (571) 272-7664. The fax phone Number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Jeffery A. Brier".

Jeffery A Brier
Primary Examiner
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